

EUROLED

SMD 7 Segment Display

7 mm Digit Height
ED 07 Series



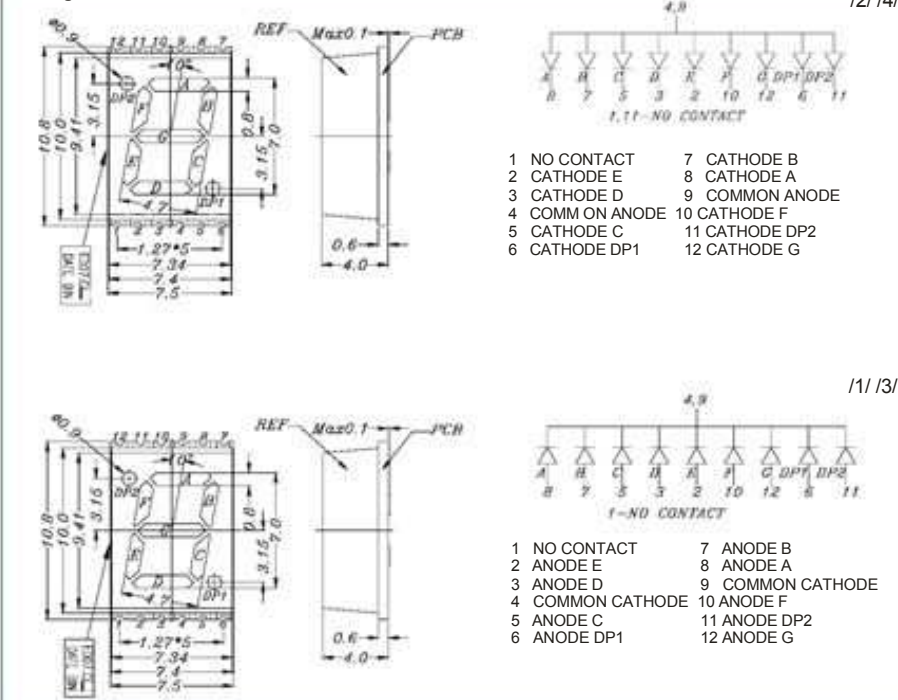
- /1/ ED07.CC.R
/2/ ED07.CA.R
/3/ ED07.CC.YG
/4/ ED07.CA.YG

Common Cathode Red
Common Anode Red
Common Cathode Yellow-Green
Common Anode Yellow-Green

Features and Benefits

- Brilliant light output
- Only 4 mm total height
- Withstands high solder treatment
- For all miniature applications
- On 24 mm blister tape

Package Dimensions:



Absolute Maximum Ratings ($T_a = 25^\circ \text{C}$)

Parameter	Symbol	Rating	Units
Forward Current ^{*3 *4}	I_F	25	mA
Pulse Forward Current ^{*1 *3}	I_{FP}	160	mA
Operating Temperature	T_{opr}	-40 ... +105	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40 ... +105	$^\circ\text{C}$
Soldering Temperature ^{*2}	T_{sol}	260	$^\circ\text{C}$
Power Dissipation ^{*3}	P_d	60	mW
Reverse Voltage	V_R	5	V

Notes: *1: I_{FP} Conditions - Pulse Width < 10 msec and DC < 1/10

*2: Soldering Time < 5 s

*3: Per Segment

*4: Minimal Forward Current 5 mA

Electro - Optical Characteristics ($T_a = 25^\circ \text{C}$)

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit	Type			
Forward Voltage		V _F	I _F = 20 mA	-	2.00	2.40	V	/1/	/2/	/3/	/4/
Reverse Current		I _R	V _R = 5 V	-	-	10	μA	/1/	/2/	/3/	/4/
Luminous Intensity	per segment	I _v	I _F = 10 mA	4.00	7.50	-	mcd	/1/	/2/		
		I _v	I _F = 10 mA	1.40	2.30	-	mcd	/3/	/4/		
	per dec. point	I _v	I _F = 10 mA	2.00	3.50	-	mcd	/1/	/2/		
		I _v	I _F = 10 mA	0.45	0.80	-	mcd	/3/	/4/		
Peak Wavelength		λ _p	I _F = 20 mA		632		nm	/1/	/2/		
					575		nm	/3/	/4/		
					624		nm	/1/	/2/		
Dominant Wavelength		λ _D	I _F = 20 mA		573		nm	/3/	/4/		
Spectral Half Bandwidth		λ	I _F = 20 mA		20		nm	/1/	/2/	/3/	/4/

Figure 1

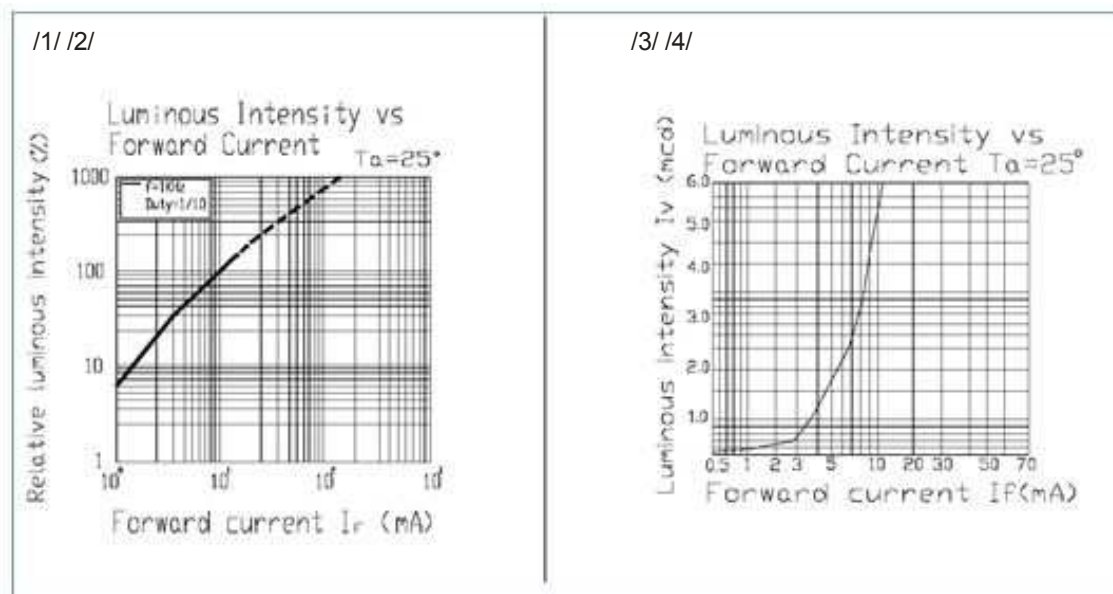


Figure 2

Typical Electro-Optical Characteristics Curves:

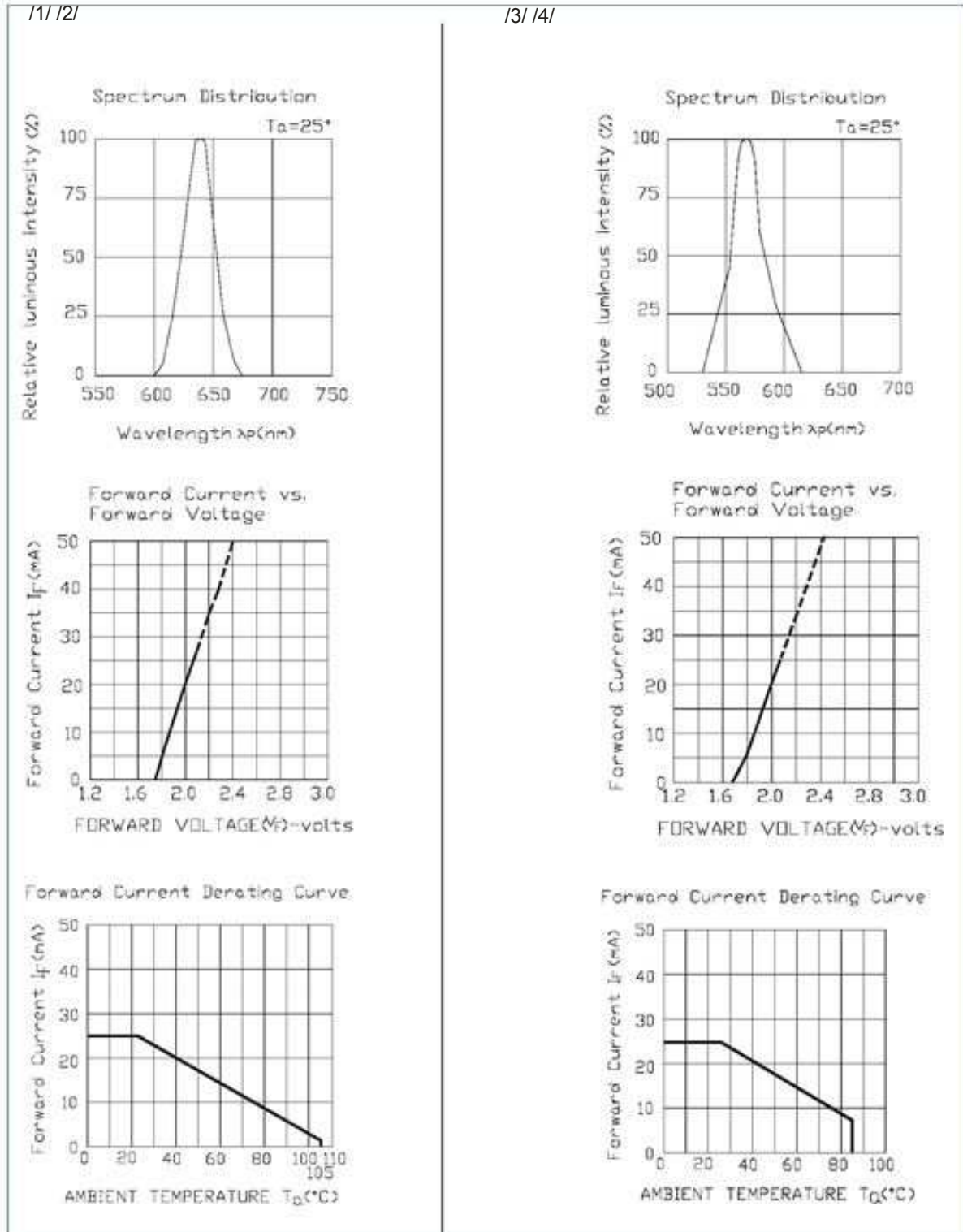
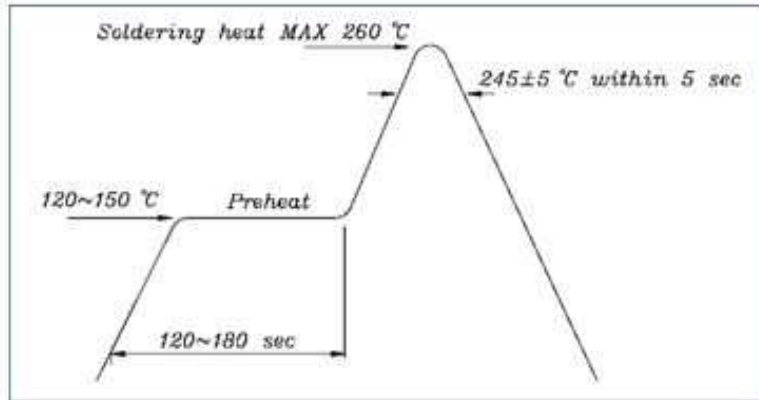


Figure 3

Soldering Heat Reliability (DIP):



Soldering Iron:

Basic spec is < 5 sec when 260° C. If temperature is higher, time should be shorter (+10° C -> -1 sec). Power dissipation of iron should be smaller than 15 W, and temperature should be controllable. Surface temperature of the device should be under 230° C.

Rework:

1. Customer must finish rework within 5 sec under 260° C.
2. The head of iron must not touch copper foil.

Figure 4

Reflow Temp./ Time:

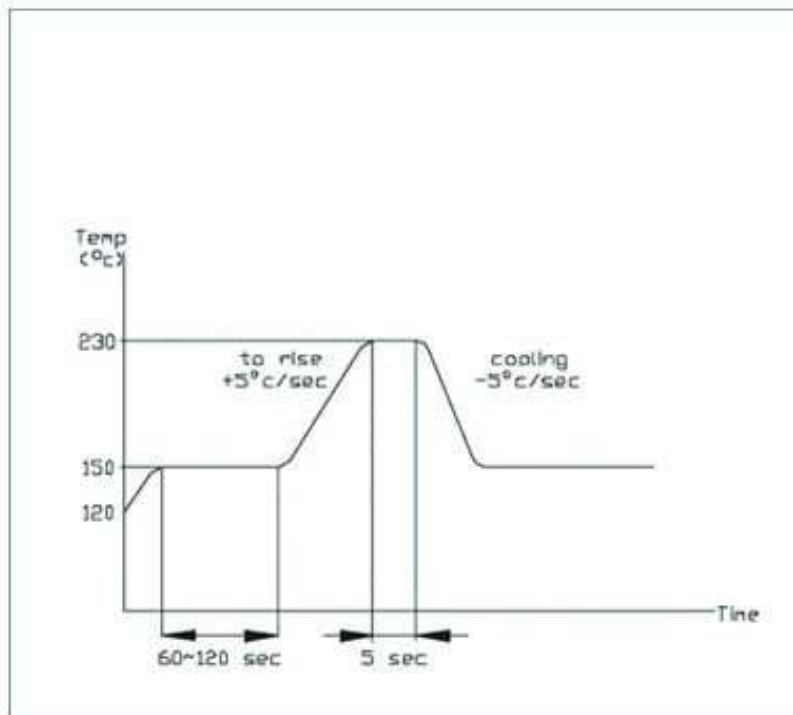


Figure 5

Package Dimensions:

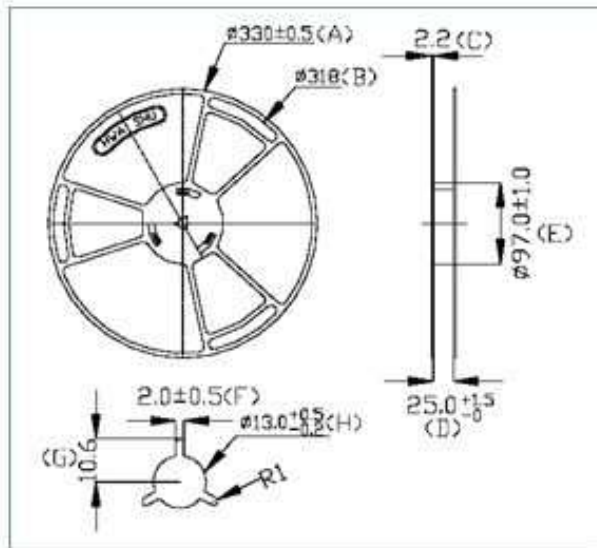
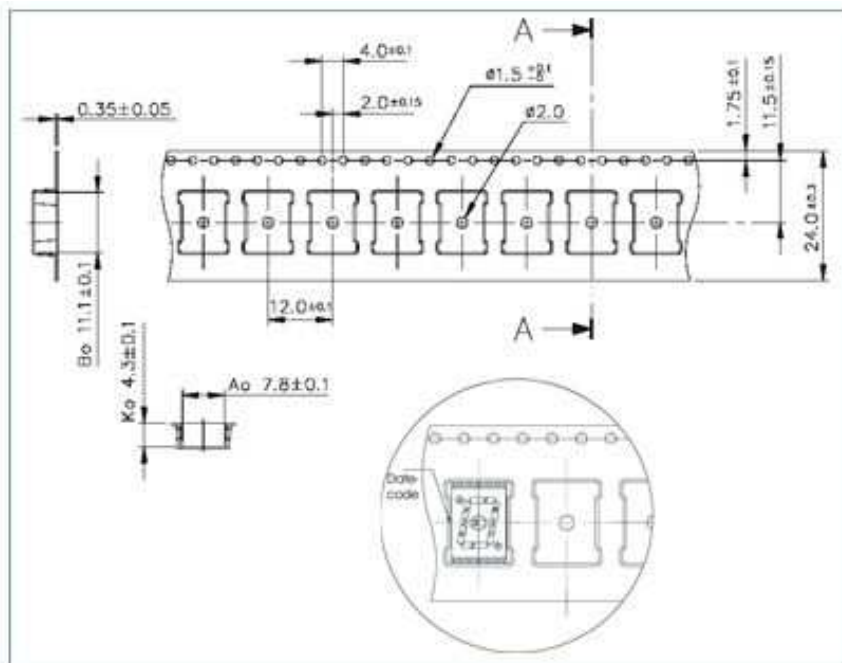


Figure 6

Taping Dimensions:



Packing Quantity Specification:
1000 pcs per roll

Excelitas Technologies
European Customer
Support for LED Solutions
Luitpoldstrasse 6
85276 Pfaffenhofen, Germany
Telephone: (+49)8441-8917-0
Fax: (+49)8441-71910
generalinquiries@excelitas.com

European Headquarters
Wenzel-Jaksch-Strasse 31
65199 Wiesbaden, Germany
Telephone: (+49)611-492-247
Fax: (+49)611-492-170

North America
Customer Support Hub
22001 Dumberry Road
Vaudreuil-Dorion, Québec
Canada J7V 8P7
Telephone: (+1) 450-424-3300
(+1) 866-574-6786 (toll-free)
Fax: (+1) 450-424-3345

Asia Customer Service Hub
47 Ayer Rajah Crescent #06-12
Singapore 139947
Telephone: (+65)6775-2022
(+65)67704-366
Fax: (+65)6775-1008

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